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NOTICE OF ALLOWANCE AND FEE(S) DUE

23599 7590 05/21/2010

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.

2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201 EXAMINER

CRANDALL LYNSEY P

ART UNIT PAPER NUMBER

3769 DATE MAILED: 05/21/2010

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/521,164
 01/19/2006
 Jaouad Zemmouri
 MATKO-0001
 9042

TITLE OF INVENTION: APPARATUS FOR TREATING AGE-RELATED MACULOPATHY (ARM)

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/23/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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23599 MILLEN, WH 2200 CLARENI SUITE 1400 ARLINGTON, Y	OON BLVD.	^{/2010} BRANIGAN, P.C	Lho	Certify that this	ficate of Mailing or Tran	smission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
AKLINGTON,	VA 22201					(Depositor's name)
			_			(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	1	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,164	01/19/2006		Jaouad Zemmouri		MATKO-0001	9042
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	ED MACULOPATHY (A)	PREV. PAID ISSUE I	FEE TOTAL FEE(S) DUI	DATE DUE
			PUBLICATION FEE DUE			
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/23/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
CRANDALL		3769	606-004000			
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. Fee Address' indication (or "Fee Address" indication form PTO/SB/147; we 0.302 or more recent) attached. Use of a Customer Number is required. Number is required.			2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is listed, no name will be praited,			
(A) NAME OF ASSIG	GNEE	ified below, no assignee pletion of this form is NO categories (will not be pr	(B) RESIDENCE: (CITY	and STATE OR CO	UNTRY)	ocument has been filed for
4a. The following fee(s) Issue Fee Publication Fee (N Advance Order	o small entity discount p		D. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038 i	s attached.	shown above) eficiency, or credit any on extra copy of this form).
- 11	s SMALL ENTITY state	is. See 37 CFR 1.27.			ENTITY status. See 37 C	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than to Office.	he applicant; a registe	ered attorney or agent; or t	he assignee or other party in
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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23599 75	90 05/21/2010	EXAMINER			
MILLEN, WHIT	E, ZELANO & BRA	CRANDALL, LYNSEY P			
2200 CLARENDO	N BLVD.	ART UNIT	PAPER NUMBER		
SUITE 1400 ARLINGTON, VA 22201			3769		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/521.164 ZEMMOURI ET AL. Notice of Allowability Examiner Art Unit LYNSEY CRANDALL 3769 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Claims/Remarks submitted on 2/24/2010. The allowed claim(s) is/are 6, 7, 9 and 10. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /LYNSEY CRANDALL/ /Henry M. Johnson, III/

Examiner, Art Unit 3769

Supervisory Patent Examiner, Art Unit 3769.

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John R. Moses on May 12, 2010.

The application has been amended as follows:

Claims 1-5 and 11-16 have been cancelled.

Claim 6 A method of treating age-related macular degeneration without using an external photosensitizer, the method comprising selecting a laser light source that enables a non-thermal therapeutic laser light beam to be emitted in a manner similar to laser light sources used for dynamic therapy, said light source being designed to emit a therapeutic laser light beam, presenting an emission wavelength lying in the range 1.26 µm to 1.27 µm at a power in the range of 1mW to 1W and illuminating the macula of the patient with said laser light beam to generate in the retina intracellular singlet oxygen directly and in sufficient quantity to occlude abnormal retinal vessels.

The following is an examiner's statement of reasons for allowance: The prior art neither teaches nor suggests a method for treating macular degeneration without using Application/Control Number: 10/521,164 Page 3

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an external photosensitizer by applying light with a wavelength in the range of 1.26 µm to 1.27 µm in order to directly generate singlet oxygen in the retina.

- 3. US 2002/0173832 to Strong discloses a method for treating macular degeneration by generating singlet oxygen, but the reference uses a photosensitizer and a wavelength that activates this photosensitizer generally between about 550 and 695 nm to accomplish this result.
- 4. US 2003/0093065 to Peyman also teaches a method of treating age-related macular degeneration, but again uses a photosensitizer and a wavelength of about 630 nm or 670 nm to activate the photosensitizer.
- 5. US 2003/0105456 to Lin discloses a method of treating age-related macular degeneration. Lin makes no mention of the use of a photosensitizer, and uses wavelengths in the range of 0.5 to 3.2 microns, overlapping the ranges claimed by applicant. Because applicant has given such a criticality to the specific, very narrow range of wavelengths used, it is the examiner's position that it would not have been obvious for one of ordinary skill in the art to choose wavelengths of 1.26 μm to 1.27 μm from the much broader wavelengths of 0.5 to 3.2 microns disclosed by Lin. Lin does not disclose any need or desire for generating singlet oxygen, therefore choosing the wavelengths 1.26 μm to 1.27 μm disclosed by applicant as responsible for the direct generation of singlet oxygen would not have been obvious.
- 6. US 2004/0162549 to Altshuler discloses the direct generation of singlet oxygen with wavelengths in the range of 1260 to 1280 nm (Table 1). Altshuler is directed towards a dermatological device and makes no mention of treating macular

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degeneration. In fact, Altshuler teaches away from treating the eye of a patient with this light radiation by providing a shield to block dangerous radiation from entering the eye. Therefore, it is the examiner's position that one of ordinary skill in the art would not choose the wavelengths disclosed by Altshuler to treat macular degeneration.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LYNSEY CRANDALL whose telephone number is (571)270-7035. The examiner can normally be reached on Monday to Thursday 8:00-5:00

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hank Johnson can be reached on (571)272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LYNSEY CRANDALL/ Examiner, Art Unit 3769

5/13/2010

/Henry M. Johnson, III/ Supervisory Patent Examiner, Art Unit 3769